7-year-old, male, European short-haired cat with pruritus and face, trunk and ventral abdomen alopecia. In descending order of probability, what is the correct list of differential diagnoses?

1. Dermatophytosis / demodicosis / epitheliotropic lymphoma / Feline degenerative mucinotic mural folliculitis
2. Epitheliotropic lymphoma / feline exfoliative dermatitis / dermatophytosis / demodicosis
3. Feline degenerative mucinotic mural folliculitis / dermatophytosis / demodicosis / epitheliotropic lymphoma CORRECT
4. Dermatophytosis / sebaceous adenitis / epitheliotropic lymphoma / Feline degenerative mucinotic mural folliculitis
5. Feline degenerative mucinotic mural folliculitis / feline exfoliative dermatitis / feline paraneoplastic alopecia

**Signalment:** 7-year-old, male, European short-haired cat.

**History:** The cat was presented with pruritus and partial to complete alopecia on the face, trunk and ventral abdomen (Fig. 1). Alopecia is accompanied by the formation of scales, especially evident in the ventral neck area. The facial skin is diffusely thickened with a bilaterally symmetrical distribution. There is also thickening of the eyelids which causes a narrowing of the space between the eyelids (Fig. 2). The cat is also moderately lethargic.

**Histopathologic Description:** Histological examination of skin biopsies is characterized by the presence of a diffuse and moderate epidermal hyperplasia with multifocal subcorneal pustules at the infundibular ostia. There is also a diffuse spongiosis, lymphocytic and mastocytic exocytosis and orthokeratotic hyperkeratosis and multifocal parakeratosis (Fig. 3). In the superficial and mid dermis is a perivascular to interstitial infiltration of mast cells, neutrophils and rare eosinophils (Fig 3). The hair follicle walls, in the isthmic and less severely in the infundibular region, are thickened and expanded by an infiltration of neutrophils, macrophages and lymphocytes (Fig. 4) and by the presence of mucin deposition, as revealed by the Alcian blue staining (Fig. 4, insert). PAS staining for fungi is negative.

**Morphologic diagnosis:** Lymphohistiocytic and neutrophilic mural folliculitis with follicular mucinosis and mixed perivascular dermatitis.

**Name of the disease:** Feline degenerative mucinotic mural folliculitis.

**Comment:** Degenerative mucinotic mural folliculitis is a rare disease that affects cats and is characterized by inflammation of the hair follicle, which leads to atrophy, degeneration and mucin production. The inflammation is primarily centered in the external sheath of the hair follicle at the level of the isthmus, extending sometimes to the infundibulum of the bulbar region. The disease affects middle-aged or older animals (4-10 years) with an apparent prevalence in male cats. No breed predilections have been described. The disease is characterized by a generalized alopecia and some degrees of lethargy. The alopecia usually begins on the face, head and neck and then becomes generalized. The alopecia is accompanied by swelling and thickening of the skin of the face and eyelids with a characteristic narrowing of eyelid fissure. Itching is usually variable, but, when present, can be intense. Systemic signs include lethargy and weight loss. Histologically, there is a mural lymphohistiocytic and neutrophilic folliculitis associated with follicular mucinosis. Unlike the follicular mucinosis, in the degenerative mucinotic mural folliculitis a progression to cutaneous lymphoma has not been described. The pathogenesis of the disease is not known, although the involvement of immune-mediated mechanisms is suspected. In some reports, the disease has been associated with FIV infection. There is no therapy for this disease, although the administration of corticosteroids may be useful in the control of the lethargy and apathy.
References:


Ihrke P.J. Newly Described Feline Skin Diseases, Proceedings of the 31st Annual Congress of the World Congress WSAVA/FECAVA/CSAVA, Prague, Czech Republic – 2006, 241-244

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Figures Legends:

Figure 1. 7-year-old, male, European short-haired cat. The cat was presented with a severe, bilaterally symmetrical alopecia affecting the face, muzzle and pinnae region, neck, ventral part of the thorax and abdomen as well as proximal limbs.

Figure 2. 7-year-old, male, European short-haired cat. There is a severe bilaterally symmetrical thickening of the head and the muzzle with narrowing of the eyelids opening. The alopecia is associated with moderate scale formation, especially on the ventral neck.
Figure 3. 7-year-old, male, European short-haired cat. The epidermis is thickened with multifocal subcorneal pustules. There is an intramural and perifollicular infiltration in the isthmic region of the hair follicles, in association with a perivascular to interstitial dermal inflammation.

Figure 4. 7-year-old, male, European short-haired cat. The hair follicle wall is thickened and expanded by an infiltration of neutrophils, macrophages and lymphocytes. Through the Alcian blue staining (insert), mucin deposition is present in the follicular epithelial intercellular spaces, in association with the inflammatory cells.